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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/743,370

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Daniel Gold

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EXAMINER

CHEA, PHILIP J

ART UNIT

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2153

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/743,370	Applicant(s) GOLD ET AL.	
	Examiner PHILIP J. CHEA	Art Unit 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to an Amendment filed March 7, 2008. Claims 1-44 are currently pending. Any rejection not set forth below has been overcome by the current Amendment.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,6-10,15-19,21-23,28-32,37-40,41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takaoka et al. (US 2003/0085914), herein referred to as Takaoka, and further in view of Grabauskas et al. (US 2004/0024887), herein referred to as Grabauskas.

1. Claims 1,6-10,15-19,21-23,28-32,37-40,41-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Takaoka et al. (US 2003/0085914), herein referred to as Takaoka.

As per claims 1,10,19,23,32, Takaoka discloses a system, as claimed, comprising:

a processor (see paragraph 50); and

a memory comprising program instructions (see paragraph 50), wherein the program instructions are executable by the processor to implement a zone visualization mechanism configured to:

obtain zoning information for a plurality of Storage Area Network (SAN) objects in a SAN, wherein the SAN comprises one or more host systems, one or more storage devices, and one or more fabrics (see Fig. 8, host system [1021], storage devices [1041] and paragraph 63, where fibre channel ports indicate a fabric); and

display zoning information for the selected SAN object, wherein the zoning information for the selected SAN object indicates one or more zones of the SAN of which the selected SAN object is a member (see paragraph 102, where the SAN object is moved into a generated area (a zone) on the screen, thereby displaying that the SAN object is a member of the zone).

Although the system disclosed by Takaoka shows substantial features of the claimed invention (discussed above), it fails to disclose in response to selection of a particular SAN object in the SAN displaying one or more tables of zoning information, including one or more entries for each one of multiple zones, wherein each of the one or more entries includes information describing a particular membership of the selected SAN object in the respective zone.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Takaoka, as evidenced by Grabauskas et al. (US 2004/0024887), herein referred to as Grabauskas.

In an analogous art, Grabauskas discloses a system for generating information on components within a network, and representing the discovered components as objects including information from the generated information (see Abstract). Grabauskas further discloses displaying a zone visualization mechanism (see Fig. 3, *showing a Fabric Object with the Zone Objects and Nodes belonging to the zone*, and paragraph 27, *describing a graph interface to access information on a particular fabric and zones*) and in response to selection of a particular SAN object in the SAN (see paragraph 27, *showing the user-selectable graphical interface where any object can be accessed in the topology and the information about the object can be accessed wherein the information accessed can be zone information of the fabrics that the SAN object can be a part of and each zone object*), displaying one or more tables of zoning information, including one or more entries for each one of multiple zones, wherein each of the one or more entries includes information describing a particular membership of the selected SAN object in the respective zone (see paragraphs 55-58, *describing how Fig. 8 shows the fields of a table included in the zone objects, where the fields hold zoning information including an entry of one zone and describing a particular membership of the selected SAN object in the respective zone (e.g. zone reference, graph node references and zone name of the zone in the fabric)*).

Given the teaching of Grabauskas, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Takaoka by employing a display table of zone information, such as disclosed by Grabauskas, in order to determine the zone information for particular SAN objects in a hierarchical tree display that is easy to navigate.

As per claims 6,15,28,37, Takaoka in view of Grabauskas further disclose that each entry in the one or more tables corresponding to a zone in the SAN (see Grabauskas Fig. 8) is user-selectable to display zone centric information for the selected zone, wherein the zone-centric information indicates one or more SAN objects that are members of the zone and relationships among the one or more SAN objects that are members of the zone (see Takaoka paragraphs 62-63).

As per claims 7,16,29,38, Takaoka further discloses that the indicated one or more SAN objects that are members of the respective zone are each user-selectable to display zoning information for the respective SAN object, wherein the zoning information for the respective SAN object indicates one or more zones of the SAN of which the respective SAN object is a member (see paragraphs 62-63).

As per claims 8,17,30,39, Takaoka further discloses that the zone visualization mechanism is further configured to display the zone-centric information for the respective zone in graphical or textual format (see Fig. 8).

As per claims 9,18,31,40, Takaoka further discloses that the zone visualization mechanism is further configured to display the zoning information for the selected SAN object in a graphical format (see Fig. 8).

As per claim 21, Takaoka in view of Grabauskas further disclose that for each zone of the SAN of which the selected SAN object is a logical member, the one or more tables of zoning information include a separate entry corresponding to each other SAN object (see Grabauskas Fig. 3, *where the SAN object [100] can have displayed each Fabric Object [102] and their separate zone information [110], and each zone information holds its own table of zoning information as described in paragraph 55*) through which the selected SAN object is connected to the zone, and wherein the system further comprises means for displaying zoning information for the other SAN object, wherein the zoning information for the other SAN object indicates one or more zones of the SAN of which the other SAN object is a member (see Takaoka Fig. 8).

As per claim 22, Takaoka further discloses displaying zone-centric information for the zones of the SAN of which the selected SAN object is a member, wherein the zone-centric information for a zone

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indicates one or more SAN objects that are members of the zone and relationships among the one or more SAN objects that are members of the zone (see Fig. 8).

As per claims 41-44, Grabauskas further discloses that the information describing a particular membership of the selected SAN object in the respective zone includes one or more of information identifying the respective zone, information identifying a fabric that includes the respective zone, information identifying a SAN object through which the selected SAN object is a member of the respective zone, and information indicating membership status of the selected SAN object in the respective zone, wherein the membership status indicates one of active and inactive (see paragraphs 55-58).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2,4-5,11,13-14,20,24,26-27,33,35-36, are rejected under 35 U.S.C. 103(a) as being unpatentable over Takaoka in view of Grabauskas as applied to claim 1 above, and further in view of Anslow et al. (US 2003/0130821), herein referred to as Anslow.

As per claims 2,11,20,24,33, Grabauskas further discloses that the one or more tables of zoning information indicates logical zone membership for the selected SAN object (see Fig. 8, *showing the table with the logical zone membership (i.e. zone name) for the selected SAN object*).

Although the system disclosed by Grabauskas shows substantial features of the claimed invention (discussed above), it fails to disclose wherein a SAN object is a logical member of a zone via relationship of the SAN object to one or more other SAN objects that are physical members of the zone.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Grabauskas, as evidenced by Anslow.

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In an analogous art, Anslow discloses a system for visualization of network devices in a computer user interface (see Abstract), further showing that logical and physical device relationships can be shown in the displayed zoning information (see paragraph 36, describing SAN components and their physical and logical interrelationship, implying logical members in relationship with physical members and paragraph 35, describing zones and the components that are members).

Given the teaching of Anslow, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Grabauskas by employing logical zone memberships in relationship to physical zone memberships, such as disclosed by Anslow, in order to manage information gathered on the different components in the SAN and providing a visualization of the network topology.

As per claims 4,13,26,35, Grabauskas in view of Anslow further disclose for each zone of the SAN of which the selected SAN object is a member, the one or more tables of zoning information include a separate entry corresponding to each other SAN object through which the selected SAN object is a logical member of the zone (see Grabauskas Fig. 3, *where the SAN object [100] can have displayed each Fabric Object [102] and their separate zone information [110], and each zone information holds its own table of zoning information as described in paragraph 55*) and wherein a SAN object is a logical member of a zone via relationship of the SAN object to other SAN objects that are physical members of the zone (see Anslow paragraph 36).

As per claims 5,14,27,36, Grabauskas further discloses that each entry corresponding to another SAN object through which the selected SAN object is a logical or physical member of the zone is user-selectable to display zoning information for the respective other SAN object, wherein the zoning information for the other SAN object indicates one or more zones of the SAN of which other SAN object is a logical or physical member (see paragraph 27, *showing the user-selectable graphical interface where any object can be accessed in the topology and the information about the object can be accessed wherein the information accessed can be zone information of the fabrics that the SAN object can be a part of and each zone object*).

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4. Claims 3,12,25,34 rejected under 35 U.S.C. 103(a) as being unpatentable over Takaoka in view of Grabauskas as applied to claims 1,10,19,23,32 above, and further in view of Bramhall et al. (US 2003/0195956), herein referred to as Bramhall, further in view of Anslow.

As per claims 3,12,25,34 , although the system disclosed by Takaoka in view of Grabauskas shows substantial features of the claimed invention (discussed above), it fails to disclose that the displayed zoning information further indicates one or more zone aliases of the SAN of which the selected SAN object is a logical or physical member.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Takaoka in view of Grabauskas, as evidenced by Bramhall.

In an analogous art, Bramhall discloses a system for ensuring the unique zoning membership representation of a network environment (see Abstract). Further showing an indication of a zone alias that a SAN object is a logical or physical member of (see paragraph 33).

Given the teaching of Bramhall, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Takaoka in view of Grabauskas by employing a zone alias indicator, such as disclosed by Bramhall, in order to add or remove a group of zone participants by alias.

In considering that a zone alias represents a logical grouping of SAN objects, and wherein a SAN object is a logical member of a zone alias via relationship of the SAN object to one or more SAN objects that are physical members of the zone alias, Anslow shows this in paragraph 36 (see discussion above regarding Anslow and logical and physical interrelationships).

Response to Arguments

5. Applicant's arguments, with respect to Takaoka's failure to teach in response to selection of a particular SAN object in the SAN displaying one or more tables of zoning information, including one or more entries for each one of multiple zones, wherein each of the one or more entries includes information describing a particular membership of the selected SAN object in the respective zone have been fully

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considered and are persuasive. However, Grabauskas has been introduced to make up for the deficiencies of Takaoka. Please see rejection above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP J. CHEA whose telephone number is (571)272-3951. The examiner can normally be reached on M-F 6:30-4:00 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Glenton B. Burgess/
Supervisory Patent Examiner, Art Unit 2153

Philip J Chea
Examiner
Art Unit 2153

PJC 5/12/08